

Martin J. Chavez, Mayor

ALBUQUERQUE / BERNALILLO COUNTY AIR QUALITY CONTROL BOARD NEWSLETTER



Thaddeus Lucero,
Bernalillo County Manager

The Air Shed

PUBLISHED MONTHLY BY THE AIR QUALITY DIVISION

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APRIL'S
AIR QUALITY INDEX:

GOOD!

FOR ACTUAL AQI VALUES,
SEE PAGE 5

**City of Albuquerque
Environmental Health Department
Director - 768-2600**

**Albuquerque / Bernalillo County
Air Quality Control Board
768-2600**

**Air Quality Division Manager
768-1930**

**Important Phone Numbers
Air Quality Index & Pollen
768-4731 opt 1 or 766-7664
Burn/No Burn 768-BURN (2876)**

**Ambient Air
Monitoring - 768-1969**
♦ National Ambient Air Quality
Standards
♦ AQI & Seasonal Pollen

**Compliance
& Field Enforcement - 768-1930**
♦ Facility Inspection
♦ Topsoil Disturbance
♦ Compliance Assurance
♦ Asbestos Abatement
♦ Open Burn Permits
♦ Woodburning Exemptions

**Education, Outreach & Technical
Assistance - 768-1970**
♦ Pollution Prevention
♦ Emergency Preparedness
♦ Community Outreach
♦ Small Business Assistance
♦ *The Air Shed* Newsletter

**Permitting & Emission Inventories -
768-1930**
♦ Application Review & Permit Issuance
♦ Permitting Policy / Development
♦ Ambient Air Dispersion Modeling
♦ Emission and Pollutant Inventories
♦ Aerometric Information Retrieval
System [AIRS]

Control Strategies- 768-2600
♦ Development of Air Quality
Regulations
♦ Preparation of State Implementation
Plan elements
♦ Air Quality Control Board
♦ Review Federal environmental
assessments

**Public Health
Initiatives - 767-5621**
♦ Air Quality Complaints
♦ Indoor Air

Quality Assurance - 768-1963
♦ EPA Reporting
♦ Review & Validation of Data

Odysseus and Aeolus

Once again, warming temperatures signal the change of seasons. We are in the midst of spring. Springtime in New Mexico means wind. So, according to Greek legend, Odysseus must be sleeping again.

Odysseus, the legendary hero of the Greek poet Homer's *Odyssey*, attained greatness for his exploits during the Trojan War, but became the stuff of legend for his trials and tribulations while on his ten-year journey home to Ithaca after the war was over. He and his men faced many perils during their journey. Odysseus, through his legendary cunning and eloquent speech, successfully led his men past such threats as the pleasure-giving drugs of the Lotus-Eaters, the cannibalistic Cyclopes and the allure of the witch, Circe, who drugged unfortunate visitors and turned them into beasts to be served at dinner. Odysseus even visited the underworld during his journey to gain the secrets only the dead could tell him about what pitfalls might lie in front of him.

Several years into their journey, Odysseus and his men came to the floating island, Aeolia, ruled by King Aeolus. Zeus, the king of all the Greek gods had made Aeolus custodian of the winds. Both the gentle winds and the wild winds were imprisoned in caves on the island and could be released by Aeolus upon the command of Zeus to visit his whimsy on the mere mortals below.

Odysseus, being nobody's fool, realized that Aeolus could make the rest of his journey very pleasant by arranging for favorable winds. Aeolus had grown fond of Odysseus during his protracted stay on his island and, as a favor to his newfound friend, bagged up all the unfavorable winds in a large leather sack and tied it with a silver wire and presented it to Odysseus. Only favorable winds were left free to scoot Odysseus on his way to Ithaca. Ah, but this is Greek legend and nothing is that easy.

Odysseus and his few remaining men were within sight of Ithaca when sleep finally overcame Odysseus. While the boss lay sleeping, the crew, convinced that Odysseus was hiding gold in the bag tied with silver wire, opened the bag to have a peek inside. That's, as they say, when all heck broke loose. The violent seas caused by the release of the four winds drove Odysseus and his men far back out to sea. Only Odysseus survived and he alone finally washed up on the shores of his beloved Ithaca after swimming alone for days.

What, you may well ask, does all this have to do with springtime in New Mexico? Well, like most legends, the story of Odysseus is an allegory and contains truths that endure even today.

Much like the favorable winds that sped Odysseus on his way, the fresh, gentle breezes that stir the air above us can serve to disperse the pollution that accumulates in our air shed. Or the gentle breezes can build to wild, gusty winds that scour the soil from under our feet and hurl it through the air. Apparently, if you believe in the Greek myths of old, Zeus may be calling those shots. But it remains for us mortals to be very careful not to open the bag tied with the silver wire.

This promises to be a very dry year. The drought conditions are predicted to continue as far into the future as can be reliably forecast. As our community edges ever closer to violations of the ambient air quality standards for particulate matter it's a very good time not to fall asleep at the wheel. Just ask Odysseus.



AIR QUALITY CONTROL BOARD REPORT

Summary of Activities* April 14, 2004 Meeting of the Albuquerque/Bernalillo County Air Quality Control Board

Members Present:

Dr. Stephen Pilon, Chair
Mr. Paul Silverman
Ms. Sue Umshler
Ms. Karen Wentworth, Vice Chair

Hearing:

The combined hearing regarding the proposal to amend 20.11.1 NMAC, General Provisions and to make the amendment part of the State Implementation Plan, and to adopt a new regulation 20.11.8 NMAC, Ambient Air Quality Standards, and make the new regulation part of the State Implementation Plan, convened during the March meeting of the Board, was continued.

Regular Board Meeting

Report:

Loretta Tolefson of the Mid Region Council of Governments (MRCOG) made a presentation to the Board regarding changes expected out of the amendments to the 2025 Metropolitan Transportation Plan (MTP).

Action Items:

Action Item 1: Election of Chairman and Vice Chairman for 2004-05. Action Deferred.

Action Item 2. Decision regarding proposed amendments to 20.11.1 NMAC, General Provisions, incorporation of the amended 20.11.1 NMAC into the SIP, proposal to adopt a new regulation 20.11.8 NMAC, Ambient Air Quality Standards, and incorporating the newly adopted 20.11.8 NMAC into the SIP. Member Umshler moved to adopt Resolution 2004-2, seconded by Member Wentworth. Approved 4-0.

Action Item 3. Request for authorization to begin a hearing on June 9 which could possibly extend into the July 14, 2004 meeting to consider the proposal to adopt the second half of the carbon monoxide maintenance plan and the associated amendments to Parts 100 and 102. Request granted by the Board, with the stipulation that a hearing officer is hired to officiate at the hearing.

Action Item 4. Discussion regarding variance request by General Electric Aircraft Engines (GE) and recommendation of the Environmental Health Department Director. Final decision of the Board was de-

* Action items recorded from draft minutes still subject to Board approval at press time.

Albuquerque / Bernalillo County
Air Quality Control Board

Board Members & Staff

Stephen Pilon (City) Chair
Karen Wentworth (County) Vice Chair
Paul Silverman - County
Sue Umshler - County
Betty Chang - City
Vacant - City
Vacant - City

Alfredo Santistevan, Director
Environmental Health Department

Isreal L. Tavaraz
Air Quality Division Manager/
Secretary to the Board

Adelia Kearny
Assistant City Attorney

Glen Dennis
Vehicle Pollution Management Division Manager

Elizabeth Begay
Environmental Planning Commission Liaison

Monthly Board Meetings

Board meetings are usually held the second
Wednesday of each month at 5:15 p.m. in the
Council/Commission Chambers, lower level, Albuquerque/
Bernalillo County Government Center,
1 Civic Plaza, 400 Marquette Avenue NW
Albuquerque, NM.

Agendas, which will show the correct date and meeting
place, are generally available three days before the
meeting and can be obtained by contacting
Mr. Neal Butt at 505-768-2660
or via e-mail at: nbutt@cabq.gov.

*Notice to persons with disabilities: If you have a disability
and require special assistance to participate in any
Board meeting please call the Air Quality Division at
505-768-2600 (Voice) or
505-768-2482 (TTY)*

Vehicle Pollution Management Division Feature

Vehicle Inspection and Maintenance Program:

On April 27, 2004 the Vehicle Pollution Management Division issued a provisional certification of the Worldwide Environmental Products EIS-5000 emissions analyzer for use in the Albuquerque/Bernalillo County Vehicle Pollution Management Program. Environmental Service Products (ESP) withdrew their analyzer from consideration prior to certification tests. Consequently, the Worldwide EIS-5000 is the only analyzer approved for use in the new program and has been designated as the NM2004 analyzer.

The Worldwide EIS-5000 meets most basic specifications of the NM2004 program and has been released for priority installation in Air Care Stations with inoperative or troublesome BAR90 analyzers. These first priority stations will serve as beta test sites with extensive monitoring of initial tests by VPMD referee and audit staff. This will allow VPMD to conduct on-site training and to review numerous BAR97 tests on a wide variety of vehicles to more rapidly identify needed corrections and opportunities for improvement.



Sixteen (16) EIS-5000 units arrived from California on May 3rd with installation commencing that same day. VPMD has been sending a team consisting of a field auditor, a referee technician, and the program analyst to join the service technician from Worldwide in setting up each unit and training station personnel on its use. Five stations have received new analyzers to date and official testing using the new BAR97 analyzers is being conducted.

As required, the EIS-5000 tests vehicles using On-Board Diagnostics (OBDII) or two-speed exhaust analysis as appropriate for model year and features a quick but effective pressurized gas cap test. The new Vehicle Inspection Reports (VIRs) designed by VPMD for use in the new analyzers reduce paper use by half and are much easier for station personnel to use and file. The Worldwide EIS-5000 costs \$12,997, which is several thousand dollars less than the BAR90 analyzers cost nine years ago.

Gas Cap Testing and Voucher Program:

Interest in the free gas cap test and voucher program increased significantly following the April news conference where Mayor Chavez announced the program and demonstrated how quick and easy a gas cap test is. To date, ninety-four (94) vehicles have been brought in to VPMD for the free test with forty-nine (49) vouchers issued for missing or improperly sealing caps.



Alternative Fuels Update:

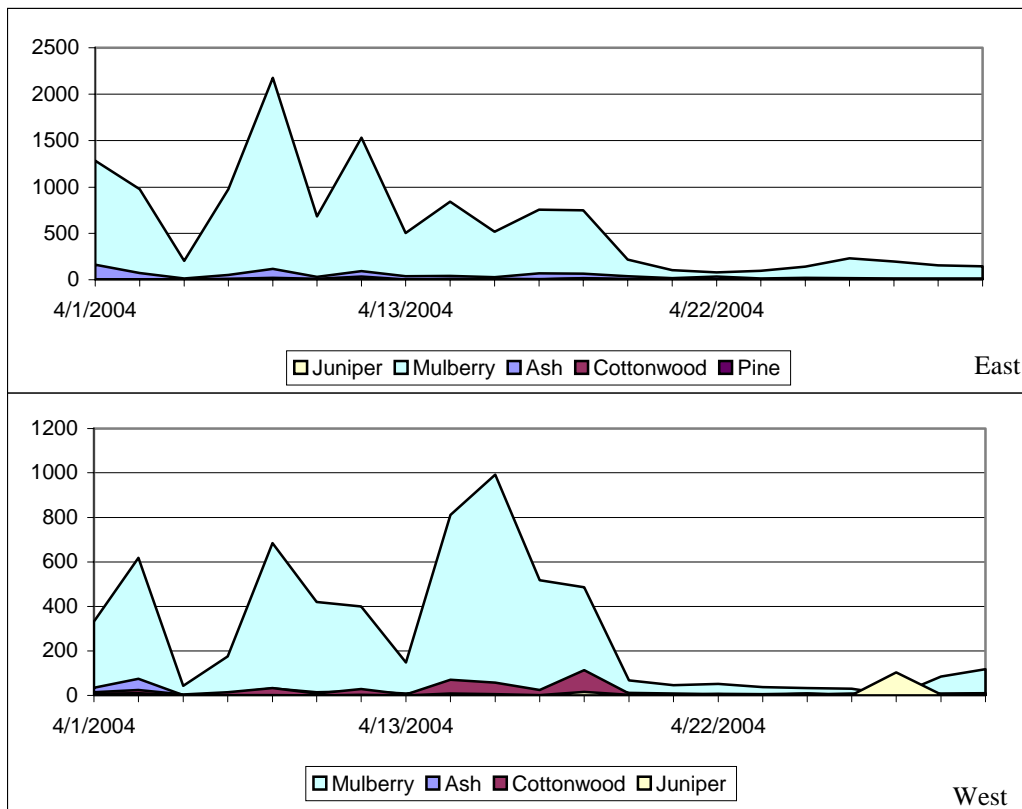
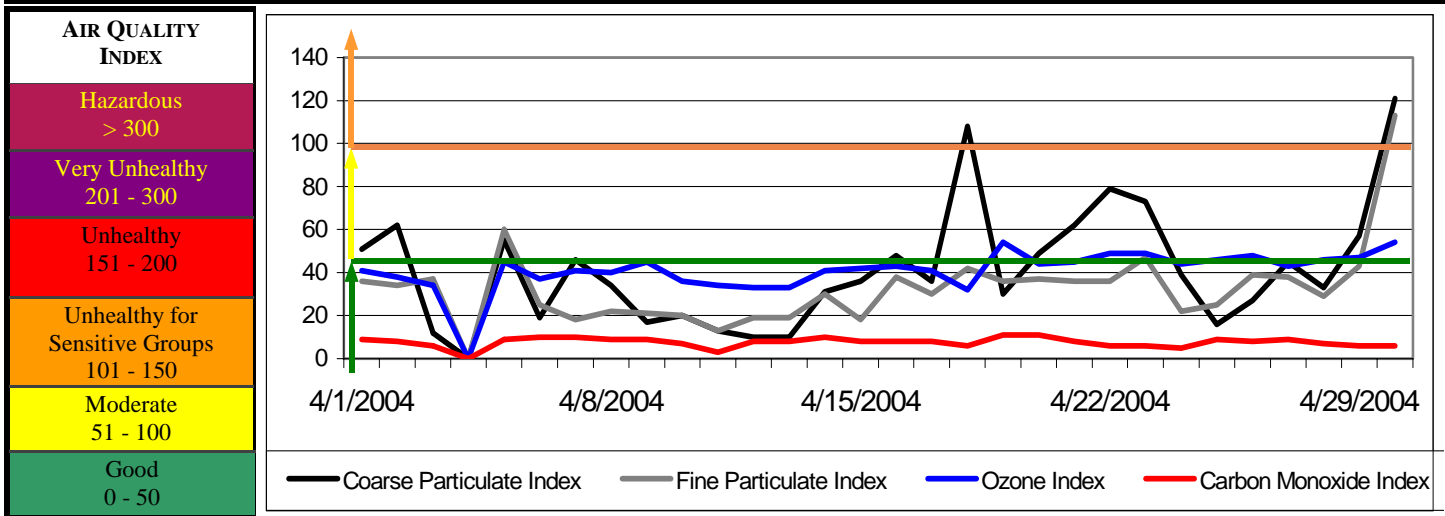


The New Mexico Green Fuels Symposium - "The Local Economics and Technology of Converting Biomass to Liquid Fuels" will be hosted by Santa Fe Community College on May 12th and 13th. The Symposium is sponsored by the New Mexico Energy and Minerals Department and the Land of Enchantment Clean Cities Coalition. The cost is \$40 which includes lunch and breaks. For more information contact esmith@sfcnm.edu.

AIR QUALITY DATA FOR APRIL, 2004

The Air Quality Index [AQI] values indicate how clean or polluted ambient air is, and if there are any health concerns associated with a specific value. The AQI in Bernalillo County is measured for four [4] nationally regulated air pollutants: Carbon Monoxide [CO], Ozone [O₃], Coarse Particulate [PM₁₀] and Fine Particulate [PM_{2.5}].

As shown by the graph below, AQI values were "Good" to "Unhealthy for Sensitive Groups" in April, which means that air pollutants at this level pose little or no health risks to our community, but those members of our community who already have respiratory problems may be slightly affected. Thus, as the values increase into a higher category, health risks will similarly increase. As you may have guessed, the last category, "Hazardous", with AQI values greater than 300, is very serious and can be detrimental to the health of the whole community even if emergency health warnings are triggered. Call the [Air Quality Information Line](tel:766-7664) at 766-7664 or 768-4731 Option 1 to get today's AQI Values.



Pollen data is reported Monday - Friday, during the months of March - October. It is reported as grains of pollen per cubic meter of air sampled. Air Quality Monitoring staff collect data from areas east and west of the Rio Grande within the greater Albuquerque metropolitan area. Pollen data from a previous 24-hour sampling period is then published in local newspapers in the weather section, broadcast with local news station weather reports, or can be obtained by calling the [Air Quality Information Line](tel:766-7664) 766-7664

New Diesel Rules

On May 10, 2004, EPA Administrator Mike Leavitt announced EPA's new program to greatly reduce harmful emissions from new nonroad diesel engines used in construction, farming, industrial, and airport service equipment. The final rule puts in place a comprehensive national program that treats the engines and fuels as a system to gain the greatest air quality benefits. This historic rule will dramatically transform nonroad diesel engines and the fuel they use.



The U.S. Environmental Protection Agency (EPA) is adopting a comprehensive national program to reduce emissions from future nonroad diesel engines by integrating engine and fuel controls as a system to gain the greatest emission reductions. To meet these emission standards, engine manufacturers will produce new engines with advanced emission-control technologies similar to those already expected for highway trucks and buses. Exhaust emissions from these engines will decrease by more than 90 percent. Because the emission-control devices can be damaged by sulfur, we are also adopting a limit to decrease the allowable level of sulfur in nonroad diesel fuel by more than 99 percent.

EPA estimates that affected nonroad diesel engines currently account for about 60 percent of total diesel particulate matter (PM) emissions and about 30 percent of total nitrogen oxides (NOx) emissions from mobile sources nationwide. These proportions can be even higher in some urban areas. The new nonroad diesel emission standards will reduce emissions by more than 90 percent, and are similar to the requirements for engines being implemented for on-road highway trucks and buses.

Nonroad diesel engines are used in machines that perform a wide range of important jobs in our economy. They also contribute greatly to air pollution in many of our nation's cities and towns. Examples of land-based nonroad applications using diesel engines include construction equipment such as backhoes, agricultural equipment such as tractors, material handling equipment such as heavy forklifts, industrial equipment such as airport service vehicles, and utility equipment such as generators and pumps.

Nonroad engines being produced today must meet relatively modest emission requirements and therefore continue to emit large amounts of nitrogen oxides (NOx) and particulate matter (PM), both of which contribute to serious public health problems. Recent data show that nearly 160 million people live in nonattainment areas for ground-level ozone, also called smog, which is formed by NOx and other pollutants. About 65 million people live in areas that violate air quality standards for PM. Reducing nonroad emissions is a critical part of the effort by federal, state, local, and tribal governments to reduce the adverse health impacts of air pollution.

Some chemical characteristics and natural impurities in diesel fuel can affect exhaust emissions from diesel engines, can damage or impede the operation of emission control devices, and can increase secondary pollutant formation in the atmosphere. EPA, which has a mandate to assure healthy air quality, has regulated highway diesel fuel quality since 1993. In 2000, as part of the Clean Diesel Trucks and Buses rule, we reduced the allowable level of sulfur in highway diesel fuel by 97 percent starting in 2006 to enable engine manufacturers to use advanced emission-control technologies to meet the more stringent emission standards.

New Hybrids Join Our Fleet

To do our share to clear the air, the City of Albuquerque Environmental Health Department just purchased two new Honda Civic hybrid sedans. The vehicles feature Honda's Integrated Motor Assist (IMA) gasoline/electric technology and are expected to deliver almost 50 miles per gallon of fuel.



The Honda hybrid uses a traditional four cylinder gasoline engine as its primary power source with supplemental power supplied by an integrated electric motor. The vehicles shown here are equipped with automatic transmissions (except for the vehicle in the center, of course), though manual transmissions are also available in the hybrid as well. The electric motor, sandwiched between the gasoline engine and the transmission, uses a special 144v Nickel-Metal Hydride battery tucked in behind the rear passenger seat as its power supply. The vehicle's on-board computer automatically engages whichever power supply is appropriate, depending on power demands and the battery's state of charge.

Honda has done a commendable job of making the hybrid technology as seamless as possible. The hybrid's controls function nearly identically to those of a traditional vehicle though, since the gasoline is designed to automatically shut off and re-start as power demands fluctuate, the vehicle's do require a gentle learning curve. Occasionally the very quiet car will fool you into reflexively reaching for the key, convinced that the car's engine has stalled. Oops, I did it again.

Department Represented at

Environmental Health Director Alfredo Santistevan, Operations Lead Fabian Macias and Community Linares-Loner attended the Public Technologies Inc. San Antonio on April 28-30. PTI sponsors an annual and appointed officials, as well as public technology topics such as the implementation of technology safety, sustainability, and transportation sectors.

topics regarding Policy & Leadership Management, Infrastructure Optimization, E-Services & Transactions, and Safe & Healthy Communities were presented in a format designed to facilitate open discussion of technology issues. Additional workshops and roundtables addressed homeland security, financing technology, interoperability and wireless communities, among others to mention just a few.



Conference

Air Quality Division
aision Therese Marti-
(PTI) Conference in
conference for elected
gists, to discuss in-
gies in the public
Educational tracks on

The City participated in the Sustainability Task Force Meeting and the Local Integration of NARAC with Cities Task Force Meeting. Albuquerque is one of five pilot cities in the LINC program that integrates National Atmospheric Release Advisory Center dispersion modeling with risk analysis support to first responders. This was the first anniversary for Albuquerque; joining Houston, Cincinnati, Seattle, and New York in sharing progress reports, lessons learned and discussions regarding the future of LINC. The presentation included executive and public technologists from PTI, NARAC and officials of the Department of Homeland Security. The LINC program is in its third year; decisions regarding funding and implementation are critical and are dependent on continued funding for NARAC, PTI and the pilot cities. We have high hopes that the information shared at this meeting will ensure success of the program and sustainability in its future.